

## **SECTION 6.0**

### **INVENTORY OF SUMMARY OF PROJECT DESIGN FEATURES, STANDARD CONDITIONS AND MITIGATION MEASURES**

#### **6.1     INTRODUCTION**

Public Resources Code (PRC) Section 21081.6 requires that state and local agencies adopt programs for monitoring and reporting the implementation of mitigation measures addressing the significant adverse environmental impacts of projects approved by agencies which are subject to CEQA. In conjunction with certification of this EIR, the City of Long Beach Planning Commission will adopt a Mitigation Monitoring Program (MMP), consistent with the requirements of PRC Section 21081.6 and the State CEQA Guidelines. The MMP will be used by the City of Long Beach for monitoring the implementation of the mitigation measures applicable to the selected project scenario or alternative.

The mitigation measures identified earlier in Sections 3.1 through 3.8 are listed in this section, by environmental resource area. This section is intended to facilitate the reader's review of the mitigation program recommended as part of this EIR by providing them all in one section of the document. These measures may be refined or deleted, or new measures added, by the Planning Commission in the Final EIR and MMP.

#### **6.2     AESTHETICS**

##### **Project Design Features**

- PDF 3.1-1     The Guiding Principals have been used in the development of the conceptual design plan. As part of final design, the requirements outlined in these documents, which are named below, would provide guidance to protect the historic integrity of the existing terminal. This also serves to ensure a unified appearance and enhance the aesthetics of the terminal area. The Guiding Principals include: (1) May 7, 1990, memorandum of understanding (MOU) by the Neighborhood and Historic Preservation Officer for the City of Long Beach providing guidelines for future environmental review of the Airport Terminal Building; (2) Secretary of the Interior's standards for rehabilitation of historic buildings; (3) Development and Use Standards for the Long Beach Airport Terminal Planned Development Plan Ordinance adopted by the City Council on September 2, 1997; (4) the City's Cultural Heritage Ordinance (Chapter 2.63 of the Municipal Code); and (5) a memorandum on considerations for new construction prepared by PCR (June 22, 2005). These documents all provide guidance on development standards for terminal area improvements and are included in Appendix B.

##### **Standard Conditions and Regulations**

- SC 3.1-1     Prior to building plan approval, the Planning Commission shall ensure that all development complies with the development standards and design guidelines contained in Ordinance No. C-7496, *Development and Use Standards for the Long Beach Airport Terminal Planned Development Plan (PD-12)*.
- SC 3.1-2     Prior to building plan approval, the Cultural Heritage Commission shall ensure that any new construction proposed adjacent to the Terminal Building or attached onto it shall comply with the Secretary of the Interior's Standards for the

Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic buildings, and more specifically, the Secretary of the Interior's Standards for Rehabilitation (Standards).

- SC 3.1-3 Prior to building plan approval, the Cultural Heritage Commission shall ensure that all development shall comply with the May 7, 1990 MOU adopted by the City Council and Cultural Heritage Commission providing guidelines for future environmental review of the Airport Terminal Building (the MOU is contained in Appendix B).

### **Mitigation Measures**

- MM 3.1-1 During construction activities, the construction contractor shall ensure that construction materials and equipment staging areas be located away from existing residential uses and, when feasible, appropriate screening (i.e., temporary fencing with opaque material) shall be used to buffer views of the construction site.
- MM 3.1-2 During construction activities, the construction contractor shall ensure that temporary construction-related security lighting shall be arranged so that direct rays will not shine on or produce glare for adjacent street traffic and residential uses. The light fixtures specified for the Project design must comply with the standard of the Illuminating Engineering Society for full cutoff capability.
- MM 3.1-3 Prior to building plan approval, the Planning Commission shall ensure that all exterior lighting be designed and located as to avoid intrusive effects on the runway operations, so as not to result in an air safety hazard. Low-intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the extent feasible. Lighting fixtures shall use shielding, if necessary to prevent spill lighting on adjacent off-site uses.
- MM 3.1-4 Prior to building plan approval, the Planning Commission shall ensure that all development projects use reflective glass that is less than 20 percent and all other materials used on exterior buildings and structures shall be selected with attention to minimizing reflective glare.

## **6.3 AIR QUALITY AND HUMAN HEALTH RISK ASSESSMENT**

### **Project Design Features**

- PDF 3.2-1 As part of project design, the City of Long Beach shall ensure the terminal area improvements are designed and constructed to meet LEED specifications.

### **Standard Conditions and Regulations**

- SC 3.2-1 During construction of the Proposed Project, the City and its contractors will be required to comply with regional rules, which would assist in reducing short-term air pollutant emissions. SCAQMD Rule 402 requires that air pollutant emissions should not create a nuisance off-site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Two options are presented in Rule 403; monitoring of particulate concentrations or active control. Monitoring involves a sampling

network around the project with no additional control measures unless specified concentrations are exceeded. The active control option does not require any monitoring, but requires that a list of measures be implemented starting with the first day of construction.

Rule 403 requires that “A person conducting active operations within the boundaries of the South Coast Air Basin shall utilize one or more of the applicable best available control measures to minimize fugitive dust emissions from each fugitive dust source type which is part of the active operation.” Rule 403 also requires that the construction activities “shall not cause or allow PM<sub>10</sub> levels to exceed 50 micrograms per cubic meter when determined by simultaneous sampling, as the difference between upwind and down wind sample.” A project is exempt from the monitoring requirement “if the dust control actions, as specified in Table 2 are implemented on a routine basis for each applicable fugitive dust source type.” Table 2 from Rule 403 is presented below as Table 6.2-1. Under high wind conditions (*i.e.*, when wind gusts exceed 25 miles per hour) additional control measures are required, and “the required control measures for high wind conditions are implemented for each applicable fugitive dust source type, as specified in Table 1.” Table 1 from Rule 403 is presented below as Table 6.2-2. Monitoring of particulate concentrations does not reduce fugitive dust emissions; therefore, to minimize fugitive dust emissions the construction activities will utilize the measures presented in Table 6.2-2 and Table 6.2-1 (Tables 1 and 2 in Rule 403) rather than the monitoring option of SCAQMD Rule 403.

Further, Rule 403 requires that the project shall “prevent or remove within one hour the track-out of bulk material onto public paved roadways as a result of their operations.” Alternatively, the project can “take at least one of the actions listed in Table 3.” Table 3 from Rule 403 is presented below as Table 6.2-3. In addition, the project would be required to “prevent the track-out of bulk material onto public paved roadways as a result of their operations and remove such material at anytime track-out extends for a cumulative distance of greater than 50 feet on to any paved public road during active operations; and remove all visible roadway dust tracked-out upon public paved roadways as a result of active operations at the conclusion of each work day when active operations cease.

**TABLE 6.2-1  
FUGITIVE DUST CONTROL ACTIONS FOR EXEMPTION TO MONITORING  
(RULE 403 TABLE 2)**

Source Category	Control Actions
<b>Earth-moving (except construction cutting and filling areas, and mining operations)</b>	<p>(1a) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the USEPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR</p> <p>(1a-1) For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.</p>
<b>Earth-moving: Construction fill areas</b>	<p>(1b) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the USEPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the USEPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.</p>
<b>Earth-moving: Construction cut areas and mining operations</b>	<p>(1c) Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.</p>
<b>Disturbed surface areas (except completed grading areas)</b>	<p>(2a/b) Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.</p>
<b>Disturbed surface areas: Completed grading areas</b>	<p>(2c) Apply chemical stabilizers within five working days of grading completion; OR</p> <p>(2d) Take actions (3a) or (3c) specified for inactive disturbed surface areas</p>
<b>Inactive disturbed surface areas</b>	<p>(3a) Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR</p> <p>(3b) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR</p> <p>(3c) Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR</p> <p>(3d) Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.</p>
<b>Unpaved Roads</b>	<p>(4a) Water all roads used for any vehicular traffic at least once per every two hours of active operations; OR</p> <p>(4b) Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR</p> <p>(4c) Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.</p>
<b>Open storage piles</b>	<p>(5a) Apply chemical stabilizers; OR</p> <p>(5b) Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR</p> <p>(5c) Install temporary coverings; OR</p> <p>(5d) Install a three-sided enclosure with walls with no more than 50 percent porosity which extends, at a minimum, to the top of the pile.</p>
<b>All Categories</b>	<p>(6a) Any other control measures approved by the Executive Officer and the USEPA as equivalent to the methods specified in Table 2 may be used.</p>

**TABLE 6.2-2  
REQUIRED BEST AVAILABLE CONTROL MEASURES  
(SCAQMD RULE 403, TABLE 1)**

Control Measure	Guidance
<b>Backfilling</b>	
01-1 Stabilize backfill material when not actively handling; and 01-2 Stabilize backfill material during handling; and 01-3 Stabilize soil at completion of activity.	<ul style="list-style-type: none"> <li>• Mix backfill soil with water prior to moving</li> <li>• Dedicate water truck or high capacity hose to backfilling equipment</li> <li>• Empty loader bucket slowly so that no dust plumes are generated</li> <li>• Minimize drop height from loader bucket</li> </ul>
<b>Clearing and Grubbing</b>	
02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and 02-2 Stabilize soil during clearing and grubbing activities; and 02-3 Stabilize soil immediately after clearing and grubbing activities.	<ul style="list-style-type: none"> <li>• Maintain live perennial vegetation where possible</li> <li>• Apply water in sufficient quantity to prevent generation of dust plumes</li> </ul>
<b>Clearing Forms</b>	
03-1 Use water spray to clear forms; or 03-2 Use sweeping and water spray to clear forms; or 03-3 Use vacuum system to clear forms.	<ul style="list-style-type: none"> <li>• Use of high pressure air to clear forms may cause exceedance of Rule requirements</li> </ul>
<b>Crushing</b>	
04-1 Stabilize surface soils prior to operation of support equipment; and 04-2 Stabilize material after crushing.	<ul style="list-style-type: none"> <li>• Follow permit conditions for crushing equipment</li> <li>• Pre-water material prior to loading into crusher</li> <li>• Monitor crusher emissions opacity</li> <li>• Apply water to crushed material to prevent dust plumes</li> </ul>
<b>Cut and Fill</b>	
05-1 Pre-water soils prior to cut and fill activities; and 05-2 Stabilize soil during and after cut and fill activities.	<ul style="list-style-type: none"> <li>• For large sites, pre-water with sprinklers or water trucks and allow time for penetration</li> <li>• Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts</li> </ul>
<b>Demolition – Mechanical/Manual</b>	
06-1 Stabilize wind erodible surfaces to reduce dust; and 06-2 Stabilize surface soil where support equipment and vehicles will operate; and 06-3 Stabilize loose soil and demolition debris; and 06-4 Comply with AQMD Rule 1403.	<ul style="list-style-type: none"> <li>• Apply water in sufficient quantities to prevent the generation of visible dust plumes</li> </ul>
<b>Disturbed Soil</b>	
07-1 Stabilize disturbed soil throughout the construction site; and 07-02 Stabilize disturbed soil between structures	<ul style="list-style-type: none"> <li>• Limit vehicular traffic and disturbances on soils where possible</li> <li>• If interior block walls are planned, install as early as possible</li> <li>• Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes</li> </ul>
<b>Earth-Moving Activities</b>	
08-1 Pre-apply water to depth of proposed cuts; and 08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and 08-3 Stabilize soils once earth-moving activities are complete.	<ul style="list-style-type: none"> <li>• Grade each project phase separately, timed to coincide with construction phase</li> <li>• Upwind fencing can prevent material movement on site</li> <li>• Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes</li> </ul>

**TABLE 6.2-2 (Continued)**  
**REQUIRED BEST AVAILABLE CONTROL MEASURES**  
**(SCAQMD RULE 403, TABLE 1)**

Control Measure	Guidance
<b>Importing/Exporting of Bulk Materials</b>	
09-1 Stabilize material while loading to reduce fugitive dust emissions; and 09-2 Maintain at least six inches of freeboard on haul vehicles; and 09-3 Stabilize material while transporting to reduce fugitive dust emissions; and 09-4 Stabilize material while unloading to reduce fugitive dust emissions; and 09-5 Comply with Vehicle Code Section 23114.	<ul style="list-style-type: none"> <li>• Use tarps or other suitable enclosures on haul trucks</li> <li>• Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage</li> <li>• Comply with track-out prevention/mitigation requirements</li> <li>• Provide water while loading and unloading to reduce visible dust plumes</li> </ul>
<b>Landscaping</b>	
10-1 Stabilize soils, materials, slopes	<ul style="list-style-type: none"> <li>• Apply water to materials to stabilize, maintain materials in a crusted condition</li> <li>• Maintain effective cover over materials</li> <li>• Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes</li> <li>• Hydroseed prior to rain season</li> </ul>
<b>Road Shoulder Maintenance</b>	
11-1 Apply water to unpaved shoulders prior to clearing; and 11-2 Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.	<ul style="list-style-type: none"> <li>• Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs</li> <li>• Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs</li> </ul>
<b>Screening</b>	
12-1 Pre-water material prior to screening; and 12-2 Limit fugitive dust emissions to opacity and plume length standards; and 12-3 Stabilize material immediately after screening.	<ul style="list-style-type: none"> <li>• Dedicate water truck or high capacity hose to screening operation</li> <li>• Drop material through the screen slowly and minimize drop height</li> <li>• Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point</li> </ul>
<b>Staging Areas</b>	
13-1 Stabilize staging areas during use; and 13-2 Stabilize staging area soils at project completion.	<ul style="list-style-type: none"> <li>• Limit size of staging area</li> <li>• Limit vehicle speeds to 15 miles per hour</li> <li>• Limit number and size of staging area entrances/exits</li> </ul>
<b>Stockpiles/Bulk Material Handling</b>	
14-1 Stabilize stockpiled materials. 14-2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	<ul style="list-style-type: none"> <li>• Add or remove material from the downwind portion of the storage pile</li> <li>• Maintain storage piles to avoid steep sides or faces</li> </ul>
<b>Traffic Areas for Construction Activities</b>	
15-1 Stabilize all off-road traffic and parking areas; and 15-2 Stabilize all haul routes; and 15-3 Direct construction traffic over established haul routes.	<ul style="list-style-type: none"> <li>• Apply gravel/paving to all haul routes as soon as possible to all future roadway areas</li> <li>• Barriers can be used to ensure vehicles are only used on established parking areas/haul routes</li> </ul>

**TABLE 6.2-2 (Continued)**  
**REQUIRED BEST AVAILABLE CONTROL MEASURES**  
**(SCAQMD RULE 403, TABLE 1)**

Control Measure		Guidance
Trenching		
16-1	Stabilize surface soils where trencher or excavator and support equipment will operate; and	<ul style="list-style-type: none"><li>• Pre-watering of soils prior to trenching is an effective preventive measure.</li><li>• For deep trenching activities, pre-trench to 18 inches, soak soils via the pre-trench and resume trenching</li><li>• Washing mud and soils from equipment at the conclusion of trenching activities to prevent crusting and drying of soil on equipment</li></ul>
16.2	Stabilize soils at the completion of trenching activities.	
Truck Loading		
17-1	Pre-water material prior to loading; and	<ul style="list-style-type: none"><li>• Empty loader bucket such that no visible dust plumes are created</li><li>• Ensure that the loader bucket is close to the truck to minimize drop height while loading</li></ul>
17.2	Ensure that freeboard exceeds six inches (CVC 23114)	
Turf Overseeding		
18-1	Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and	<ul style="list-style-type: none"><li>• Haul waste material immediately off-site</li></ul>
18-2	Cover haul vehicles prior to exiting the site.	
Unpaved Roads/Parking Lots		
19-1	Stabilize soils to meet the applicable performance standards; and	<ul style="list-style-type: none"><li>• Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements</li></ul>
19-2	Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	
Vacant Land		
20-1	In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

**TABLE 6.2-3  
TRACK OUT CONTROL OPTIONS**

(1)	Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.
(2)	Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device.
(3)	Any other control measures approved by the Executive Officer and the USEPA as equivalent to the methods specified in Table 3 may be used.

- SC 3.2-2 In support of PDF 3.2-1, requiring the design and construction of the terminal improvements to meet LEED standards, building materials, architectural coatings and cleaning solvents shall comply with all applicable SCAQMD rules and regulations.
- SC 3.2-3 In support of PDF 3.2-1, requiring the design and construction of the terminal improvements to meet LEED standards, all new and substantially modified buildings shall meet California Title 24 Energy Efficiency standards for water heating, space heating and cooling, to the extent feasible.
- SC 3.2-4 All new and modified point source facilities (e.g., utility equipment, fuel storage and dispensing) shall obtain all required permits from the SCAQMD. To obtain these permits, the facilities will need to include Best Available Control Technology (BACT) that reduces emissions of criteria pollutants.
- SC 3.2-5 In support of PDF 3.2-1 and to conserve energy, require that all exterior lighting use color-corrected low sodium lighting.

### **Mitigation Measures**

The following mitigation measures are recommended to reduce construction-related impacts associated with the Proposed Project and project alternatives:

- MM 3.2-1 The contract specifications shall require and the City shall enforce general contractors to ensure that all equipment is properly tuned and maintained in accordance with manufacturers' specifications.
- MM 3.2-2 The contract specifications shall require and the City shall enforce general contractors to maintain and operate construction equipment so as to minimize exhaust emissions. During construction, engines on trucks and vehicles in loading and unloading queues will be turned off when not in use, to reduce vehicle emissions. Construction activities should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.
- MM 3.2-3 The contract specifications shall require and the City shall enforce general contractors sweep streets as needed during construction, but not more frequently than hourly, if visible soil material has been carried onto adjacent public roads.

- MM 3.2-4 The contract specifications shall require and the City shall enforce general contractors to visually inspect construction equipment prior to leaving the site; loose dirt shall be washed off with wheel washers as necessary.
- MM 3.2-5 During construction, the City shall coordinate with the contractor to maximize the ability to power construction activity utilizing electricity from power poles rather than temporary diesel or gasoline power generators, to the extent possible.
- MM 3.2-6 The contract specifications shall require that all on-site mobile equipment used during construction shall be powered by alternative fuel sources (i.e., methanol, natural gas, propane, or butane) where feasible.
- MM 3.2-7 During construction, the City shall provide a location and require the contractor to store all construction equipment used in the project construction within the project site (away from adjacent residential areas) to reduce the impact on the roadway system and the resultant air emissions.
- On-site construction equipment staging areas and construction worker parking lots shall be located on either paved surfaces or unpaved surfaces that are periodically treated with non-toxic soil stabilizers.
- MM 3.2-8 The contract specifications shall require and the City shall enforce the contractor to schedule all deliveries related to construction activities that affect traffic flow during off-peak hours (e.g., 10:00 a.m. and 3:00 p.m.) and deliveries shall be coordinated to achieve consolidated truck trips. When traffic flow is impacted by the movement of construction materials and/or equipment, temporary traffic controls shall be provided to improve traffic flow (e.g., flag person).
- MM 3.2-9 The contract specifications shall require all on-site heavy-duty construction equipment shall be equipped with diesel particulate traps to the extent that this equipment is available at the time the contracts are awarded.
- MM 3.2-10 The construction specifications shall require and the City shall enforce that emulsified diesel fuel be used in diesel-fueled construction equipment that is not equipped with diesel particulate traps to reduce NO<sub>x</sub> emissions.

The use of emulsified diesel fuel in construction equipment is assumed to reduce construction equipment NO<sub>x</sub> emissions by 15 to 20 percent (CARB 2004). Applying the lower end of that range to the peak daily NO<sub>x</sub> emissions from construction equipment would reduce NO<sub>x</sub> emissions by approximately 70 lbs/day to a peak day NO<sub>x</sub> emission inventory for construction of 424 lbs/day. This level would still be above the significance threshold. VOC emissions would also remain significant and unavoidable.

The Proposed Project is a construction activity and, as such, would not result in operational impacts. The following mitigation options are proposed to reduce operational emission impacts associated with the Optimized Flights scenario and project alternatives:

- MM 3.2-11 During project design, the architect shall provide that all fixtures used for lighting exterior common areas are regulated by automatic devices to turn off lights when they are not needed.

- MM 3.2-12 As part of the air carrier ramp design, the City of Long Beach shall incorporate electric charging station infrastructure to support operation of electric GSE and on-airport vehicles.
- MM 3.2-13 As part of the air carrier ramp design, preconditioned air and 400 Hz power from electric units (or electric power grid) will incorporate provisions at the commercial passenger aircraft parking positions to allow aircraft pilots the ability to plug in at the gate and turn off the APU.
- MM 3.2-14 The City shall require the use of ultra-low sulfur diesel for diesel-fueled equipment that are not readily convertible to electrical power on all future lease and operational agreements for air carriers.
- MM 3.2-15 Through its lease language with them, the City of Long Beach shall require the airlines to comply with the South Coast GSE MOU signed by the airlines and CARB in December 2002, or replacement agreements and/or regulations. Through the implementation of MM 3.2-12 and MM 3.2-13 the Airport will design the infrastructure necessary to assist airlines in complying with the GSE MOU. The GSE MOU includes provisions for retrofitting diesel GSE with particulate traps where feasible. Therefore, compliance with the GSE MOU would reduce PM<sub>10</sub> and PM<sub>2.5</sub> impacts as well as NO<sub>x</sub> and VOC emissions.

The mitigated criteria pollutant emission inventories associated with installing preconditioned air, 400 Hz power, and electric battery chargers would reduce APU CO emissions by 61 and APU NO<sub>x</sub> emissions by 57 percent in 2011 and 2020. GSE CO emissions would be reduced by 97 percent in 2011; and GSE NO<sub>x</sub> emissions would be reduced by 55 percent in 2011 and 40 percent in 2020.

Comparing the mitigated Project criteria pollutant incremental inventories to the operational emission thresholds indicates that the mitigated inventories of all pollutants except NO<sub>x</sub> would be below the significance thresholds in 2011 and 2020.

#### **6.4 CULTURAL RESOURCES**

- PDF 3.3-1 The Guiding Principals have been used in the development of the conceptual design plan. As part of final design, the requirements outlined in these documents, which are named below, would provide guidance to protect the historic integrity of the existing terminal. The Guiding Principals include: (1) May 7, 1990, memorandum of understanding (MOU) by the Neighborhood and Historic Preservation Officer for the City of Long Beach providing guidelines for future environmental review of the Airport Terminal Building; (2) Secretary of the Interior's standards for rehabilitation of historic buildings; (3) Development and Use Standards for the Long Beach Airport Terminal Planned Development Plan Ordinance adopted by the City Council on September 2, 1997; (4) the City's Cultural Heritage Ordinance (Chapter 2.63 of the Municipal Code); and (5) a memorandum on considerations for new construction prepared by PCR (June 22, 2005). These documents all provide guidance on development standards for terminal area improvements and are included in Appendix B.

## **Standard Conditions and Regulations**

- SC 3.3-1 Should any archaeological resources be uncovered during grading or excavation activities, these activities shall be diverted to a part of the site away from the find, and a qualified archaeologist shall be contracted by the contractor to: (1) ascertain the significance of the resource; (2) establish protocol with the project applicant to protect such resources; (3) ascertain the presence of additional resources; and (4) provide additional monitoring of the site, if deemed appropriate. If human remains are discovered on the site, the Los Angeles County Coroner shall be contacted to examine the remains, and the provisions of Section 15064.5(3) of the CEQA Guidelines shall be followed.
- SC 3.3-2 If human remains are encountered during ground-disturbing activities, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition of the materials pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC). The NAHC will determine and notify a Most Likely Descendent (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The descendent must complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.
- SC 3.3-3 In compliance with Chapter 2.63 of the Municipal Code no permits for the alteration, remodel, enlarging, or improvements to the Airport Terminal, shall be issued prior to review by the Cultural Heritage Commission and issuance by the Commission of a certificate of appropriateness.
- SC 3.3-4 Should any paleontological resources be uncovered during grading or excavation activities, the construction contractor shall divert activities to a part of the site away from the find, and a qualified paleontologist shall be contracted by the contractor to: (1) ascertain the significance of the resource; (2) establish protocol with the project applicant to protect such resources; (3) ascertain the presence of additional resources; and (4) provide additional monitoring of the site, if deemed appropriate. If human remains are discovered on the site, the Los Angeles County Coroner shall be contacted to examine the remains, and the provisions of Section 15064.5(3) of the CEQA Guidelines shall be followed.

## **Mitigation Measures**

It was determined that, prior to mitigation, the proposed terminal area improvements conceptual design has the potential to cause a substantial adverse change, as per Section 15064.5(b) of the CEQA Guidelines, in the significance of the Long Beach Airport Terminal Building because physical characteristics that convey the historical significance of the resource would be materially altered in a manner that may not meet the Secretary's Standards. Those specific design concepts that have been identified as potentially adverse have corresponding mitigation measures as explained in the list below. If during the final design phase these specific design plans are not selected, then the associated mitigation measures would not be necessary. The applicability of these measures would be determined through design review by the Cultural Heritage Commission and issuance by the Commission of a certificate of appropriateness, as outlined in Chapter 2.63 of the Municipal Code (SC 3.3-3). Additionally, other design measures

may be recommended by the Cultural Heritage Commission through the design review process, which would be required prior to issuance of a certificate of appropriateness.

- MM 3.3-1 If the proposed Airport Terminal improvements are to be connected to the original 1941 structure, then the project architect shall design the connection between the new structure and the existing Airport Terminal Building so that it is attached beneath the existing cornice, to be consistent with the Streamline Moderne design.
- MM 3.3-2 If during final design, new windows are required in the existing Airport Terminal Building, the project architect shall ensure that window treatments reference the style of the original Airport Terminal windows, which are very specific to the Airport Terminal. The use of the window wall, as seen on the northwest and southwest corner, shall be used as an example.
- MM 3.3-3 If during the final design, window replacement is proposed for the original Airport Terminal Building, then the new window(s) shall replicate the original style of fenestration. If the original windows that are currently missing from the building are still extant, then those windows shall be returned to their original location, if feasible.
- MM 3.3-4 If during final design, new doorframes in the Airport Terminal Building are proposed, then the project architect shall reference the style of the original doorframes located on the east and south facades of the original Airport Terminal Building for the new doorway(s).
- MM 3.3-5 The City of Long Beach, Public Works Director or designee shall stipulate in the plans and specifications that exterior material should be compatible in type, color and finish to the existing material used on the Airport Terminal Building. Testing should be done to determine original colors, if necessary. Implementation of this mitigation measure will be at the direction of the Cultural Heritage Commission.
- MM 3.3-6 If during final design, the shelter/ticketing areas are proposed on either side of the existing 1941 Airport Terminal Building, then the project architect shall scale down the proposed design. This could be accomplished with a lower profile, possibly with a flat roof that fits in visually with the horizontal nature of the architectural style of the terminal. The manner in which this mitigation measure will be implemented shall be reviewed by the Cultural Heritage Commission as part of the issuance of the certificate of appropriateness.

## **6.5 HAZARDS AND HAZARDOUS WASTES**

### **Project Design Features**

- PDF 3.4-1 The proposed terminal improvements would be constructed in a manner consistent with LEED standards certification requirements to, among other things, minimize potential hazards and hazardous waste impacts.

### **Standard Conditions and Requirements**

- SC 3.4-1 The Proposed Project and any additional flights associated with optimize flight operations would be required to comply with the provisions of the *Long Beach Airport Certification Manual* and *Long Beach Airport Rules and Regulations*

- pertaining to the handling, use, and disposal of hazardous materials and hazardous wastes.
- SC 3.4-2 The Contractor shall develop a SWPPP to minimize potential short-term significant hazardous materials impacts associated with construction activities.
- SC 3.4-3 The Airport Terminal Building is known to contain ACMs. The applicant shall comply with notification and asbestos removal procedures outlined in SCAQMD Rule 1403 to reduce asbestos-related health issues.
- SC 3.4-4 Prior to demolition of any facilities at Million Air, the applicant shall test for asbestos containing materials. Should ACM or ACP be found, the applicant shall comply with notification and asbestos removal procedures outlined in SCAQMD Rule 1403 to reduce asbestos related health risks.
- SC 3.4-5 The City Engineer, or his designee, shall verify that every contractor transporting or handling hazardous materials and/or wastes during project implementation has permits and licenses from all relative health and regulatory agencies to operate and properly manifest all hazardous or California regulated material.
- SC 3.4-6 The Airport shall comply with the Airport Industrial NPDES permit (CAS000001/WDID 4B19S004985). Construction activities that disturbs more than one acre shall abide by the State issued State Water Resources Control Board Order 99-08 General Permit CAS000002. As part of this process, the Airport would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP).
- SC 3.4-7 Construction of the Proposed Project shall be in compliance with local and State construction and building requirements and regulations, including the Uniform Building Code.
- SC 3.4-8 Prior to initiating construction activities, the contractor shall verify the locations of underground pipelines in the terminal area, ramp, and parking areas. Appropriate precautions shall be taken to ensure that pipelines are not disturbed or are properly relocated during construction.
- SC 3.4-9 Prior to issuance of grading permits, the applicant shall test the soil for aerially deposited lead and dichloro-diphenyl-trichloroethane (DDT). As a result of soil testing, should aerially deposited lead or DDT be found in quantities that exceed acceptable thresholds, the applicant shall develop a remediation program to dispose of soil material properly.

### **Mitigation Measures**

- MM 3.4-1 Prior to the initiation of demolition/construction, the Contractor shall develop an approved Health and Safety Contingency Plan (HSCP) in the event that unanticipated/unknown environmental contaminants are encountered during construction. The plan shall be developed to protect workers, safeguard the environment, and meet the requirements of the CCR, Title 8, General Industry Safety Orders – Control of Hazardous Substances. The Plan shall include measures for handling any unknown wastes or suspect materials discovered during construction by the Contractor, which he/she believes may involve hazardous waste or hazardous materials.

The HSCP should be prepared as a supplemental to the Contractor's Site-Specific Health and Safety Plan, which should be prepared to meet the requirements of CCR Title 8, Construction Safety Orders.

- MM 3.4-2 Prior to the demolition of any on-site building or portion of any on-site building constructed prior to 1973, the City shall screen the buildings for lead-based paint. If lead-based paint is identified, mitigation shall be developed in accordance with all applicable federal, State, and local regulatory requirements.
- MM 3.4-3 During demolition and excavation activities and during preparation of the geotechnical study in the design phase, the City shall have a qualified inspector onsite to inspect and sample the soil for contaminants. If observations during demolition activities indicate that site soil is affected by contaminants, demolition work should be stopped in the area involved until an analysis of the soil conditions can be performed and additional recommendations evaluated and performed as necessary.
- MM 3.4-4 As part of the contract specification, a haul route, which could include Willow Street, shall be designated by the City Engineer, or his designee. During construction, the City Engineer, or his designee shall instruct every contractor that no hazardous or acutely hazardous materials may be transported onto the Airport via Willow Street to avoid potential impacts within one-quarter mile of the Alpert Jewish Community Center, where school programs are conducted.

## **6.6 LAND USE AND RELATED PLANNING PROGRAMS**

There are no project design features or standard conditions for land use. The significant land use impacts in Section 3.5 are associated with the Optimized Flights scenario potential to induce airport land uses beyond the Airport boundary. Specifically, the increased flight levels would require additional vehicular parking beyond the levels provided by the Proposed Project. Mitigation measure MM 3.8-2 (Transportation and Circulation) would reduce this impact to a level of less than significant. No other mitigation measures pertaining to land uses are proposed.

## **6.7 NOISE**

There are no project design features for noise reduction. The terminal area improvements would not require any measures to minimize noise impacts.

### **Standard Conditions and Regulations**

- SC 3.6-1 The Airport Noise Compatibility Ordinance would apply to continued operations at the Airport. All future operations would need to be consistent with the provisions of the ordinance.
- SC 3.6-2 The contractor shall comply with the City of Long Beach Noise Ordinance pertaining to limitations on construction activities, as outlined in Exhibit 3.6-12, to the extent feasible while minimizing any potential conflicts with aviation activities.

### **Mitigation Measures**

- MM 3.6-1 The City shall conduct noise measurements during any night construction on Parcel O where such construction involves the use of heavy construction

equipment such as front loaders, tractors, graders, paving machines, jackhammers or similar devices. Such measurements shall be made near the homes located directly across Clark Avenue from Parcel O. If any night measurement exceeds the limits specified in Sections 8.80.150 and 8.80.160 of the Long Beach Municipal Code as a result of the construction activity, the operation shall be terminated until such time that a construction noise mitigation plan can be put into effect that will result in compliance with the night time noise limits. Note that in the case where ambient noise levels exceed the noise limits specified in Section 8.80.160, the allowable noise exposure standard shall be increased per Section 8.80.150 [C] of the Municipal Code to reflect ambient levels.

Existing aviation noise and potential noise levels under an Optimized Flights scenario include homes within the 65 CNEL contour. These impacts are not project related but are an existing condition and would also occur with the full realization of all the flights permitted in the Airport noise budget. Though mitigation is not required because there is not a nexus between the impact and the Proposed Project, it is recommended that the City of Long Beach adopt the following mitigation measure to address the noise impact associated with the flight levels permitted under the Airport Noise Compatibility Ordinance. In addition to all homes within the 65 CNEL contour, the following mitigation measure proposes providing noise attenuation to existing schools within the 60 CNEL contour because Congress has authorized the use of federal funds for attenuating existing schools to a level of 60 CNEL. The locations of those homes and schools currently and projected to qualify for the noise attenuation are shown in Section 3.6 (see Exhibits 3.6-16 and 3.6-17).

- MM 3.6-2 Within 24 months of certification of the EIR, the Airport Manager shall develop a land use compatibility program addressing existing and future aviation noise levels. The program shall be an ongoing voluntary program that will provide noise attenuation and be available to all residential units within the 65 CNEL contour and schools within the 60 CNEL contour based on the contours published for Long Beach Airport for the previous calendar year (Quarterly Report for 12 month Period Ending December 31). In exchange for sound insulation treatment, the owners of the property will provide the City of Long Beach an aviation easement over said property. The program shall identify (1) methods of providing noise attenuation; (2) funding sources for the improvements; (3) methods for establishing priorities for implementing the improvements; and (4) an installation agreement. The land use compatibility program will be administered by the City of Long Beach, Airport Bureau.

## **6.8 PUBLIC SERVICES**

### **Project Design Features**

- PDF 3.7-1 The Proposed Project and the build scenarios include a number of features that would enhance public safety and security at the Airport. These features would reduce overcrowding and provide an expanded baggage screening area, which would also be enclosed to protect sensitive screening equipment.

## **Standard Conditions and Regulations**

- SC 3.7-1 Prior to the initiation of construction activities, the City's contractor shall prepare a Traffic Control Plan to ensure that adequate emergency access is maintained at the Airport during construction. As part of the Traffic Control Plan the contractor shall alert emergency and security service providers of the construction activities for each phase of construction. The Traffic Control Plan shall be submitted to the City Traffic Engineer for approval.
- SC 3.7-2 During project design, the facility improvements shall adhere to TSA, FAA, and all applicable standards including City of Long Beach fire code, building code, and safety code. Long Beach Fire Department shall review and approve design plans as part of the site plan review and building permit processes.
- SC 3.7-3 During construction activities, the relocation or modification of TSA facilities shall be coordinated with TSA to ensure that there is no compromise to the TSA function that would adversely affect TSA's ability to perform its passenger and baggage security screening activities.
- SC 3.7-4 Prior to initiation of any modifications to the airfield side, the contractor shall provide a Construction Phasing Implementation Plan, meeting the approval of the Airport Manager. The Plan shall demonstrate how construction activities will be conducted and that all applicable FAA airfield safety requirements are being met. In addition, the contractor shall prepare a safety plan and participate in on-going weekly safety meetings during construction.

## **6.9 TRAFFIC AND CIRCULATION**

The two impacted intersections along Lakewood Boulevard at Spring and Willow Streets are currently built out to the maximum feasible configuration. Additional improvements would require extensive right of way purchases that would impact several local businesses. Discussions with City staff indicate that no further lane additions are feasible at these two intersections. However, as discussed above, the impacts to these intersections under the Existing Plus Optimized Flights scenario are not expected until at a substantial number of the additional flights and associated passengers are added. For the Spring Street at Lakewood Boulevard intersection, the intersection would reach LOS E when approximately 375 additional AM peak hour trips or an increase of 3,500 ADPM passengers (45 percent of the total added) over 2005 conditions. At the Willow Street and Lakewood Boulevard intersection, the intersection currently operates at LOS E, and would exceed the 0.02 V/C impact threshold when approximately 675 additional AM peak hour trips or 6,340 additional ADPM passengers occur. Currently, the ADPM is 9,246 passengers. Therefore, impacts would be expected if the ADPM level reached 12,746 passengers.

Though the Spring Street/Lakewood Boulevard intersection would still operate at a deficient level of service in the 2020, this is not an impact of the Proposed Project or the Optimized Flights scenario. Elsewhere the improvements associated with the Douglas Park would accommodate the additional demand associated with the Optimized Flights scenario. The improvements for Douglas Park include various Adaptive Traffic Control System measures, which are expected to increase the saturation flow rate by 10 percent to 1,760 vehicles per hour. While these improvements are expected, they are not currently programmed in any capital improvement program; therefore, their implementation cannot be relied upon to mitigate the impacts of the Existing with Optimized Flights scenario. Though the Optimized Flights are not a

component of the Proposed Project, it is recommended that the following mitigation measure be adopted should the air carriers make the necessary adjustments to qualify for additional flight.

- MM 3.8-1 In conjunction with the allocation of additional flights in accordance with the Airport Noise Compatibility Ordinance (Optimized Flights) the City shall develop a traffic monitoring program when the ADPM passenger levels reach 12,700. The traffic monitoring program shall evaluate the LOS at the Spring Street and Lakewood Boulevard and the Willow Street and Lakewood Boulevard intersections. If deficient LOS is identified, the City of Long Beach shall develop and implement a mitigation program that includes transportation management control measures to enhance the efficiency of traffic movement. Post implementation monitoring shall be required to ensure that sufficient capacity enhancement have been provided to accommodate the traffic associated with the increased passenger levels. If no deficiency in LOS is identified, the traffic monitoring of the key intersections shall be conducted on an annual basis or until such time as the improvements provided for as part of the Douglas Park project are implemented.

With the Optimized Flights scenario the parking structure for the Airport would be insufficient to accommodate the additional passenger levels. Though the Optimized Flights scenario is not a component of the Proposed Project, the following mitigation measure is proposed to address this potential impact.

- MM 3.8-2 In conjunction with the allocation of additional flights in accordance with the Airport Noise Compatibility Ordinance (Optimized Flights) when the annual passenger levels reach 4.2 MAP the Airport Manager shall identify and develop additional on-site parking opportunities. This may include development of an additional parking structure within the Airport Entrance area. Implementation of the identified improvements would require separate documentation pursuant to CEQA.